

Remarks/Arguments:

This is a reply to the office action of December 21.

The Applicants respectfully request that the Examiner reconsider this application in the light of the foregoing amendments and the following remarks.

The specification has been amended for the purpose of correcting minor errors. Moreover, the metric units have been converted to inches. No new matter is added by the amendments to the specification.

Rejection under 35 USC 102(a)

The Examiner rejected Claim 1 under 35 U.S.C. 102(a) as being anticipated by JP 2004-268406 [abstract].

Applicants' claimed skin-integrated-foamed product for a vehicle seat, as set forth in amended Claim 1, comprises a skin and a layer of a first foamed resin material integrated with the skin. The skin has a double layer structure which is formed of a sheet of covering material having air-permeability, such as fabric, and a foamed slab made of a second foamed resin material including an ether-system, and laminated on a back of the covering sheet as a layer of wadding material. The foamed slab has considerably low air-permeability represented by the formula of $0 < \text{an air-permeation amount} \leq 1 \text{cc/cm}^2/\text{sec}$, and a cell structure, the number of whose cells is about 45-55 per inch. In the product, a portion of the first foamed resin material is impregnated into the foamed slab and forms a foamed resin-impregnated layer within the foamed slab, so that the skin and the layer of the first foamed resin material are integrated with each other.

In explaining the reasons for this rejection, the Examiner indicated that JP '406 relates to a skin material for integrating foam molding making it possible to prevent the permeation of a foamable raw solution without using a barrier layer such as a resin film or the like to achieve the simplification of a manufacturing process and the reduction of cost, which is hard to be steamed because of proper moisture permeability and improved in touch, and a skin integrated foamed molded product. The Examiner further indicated that the skin material for skin integrating foam molding is constituted by integrating a skin with a liquid resin impermeable polyurethane sheet which is characterized in that air permeability is $5 \text{ cc/cm}^2/\text{sec}$ or below and a plurality of micropores are made in cell film (foam layer).

In the Applicants' claimed product as set forth in amended Claim 1, the foamed slab has the cell structure, the number of whose cells is about 45-55 per inch, and has air-permeability represented by the formula of $0 < \text{an air-permeation amount} \leq 1 \text{ cc/cm}^2/\text{sec}$. The inventors zealously investigated and, as a result, have found that, by setting of the cell density of the foamed slab to about 45-55 per inch and setting of the air-permeability of the foamed slab to that represented by the formula of $0 < \text{an air-permeation amount} \leq 1 \text{ cc/cm}^2/\text{sec}$, it is possible to provide the product in which even if impregnation of the foamed resin material into the wadding material is progressed to a certain degree, a surface of the product feels soft or tender to the touch and which can provide a good sitting feeling to the user and can positively prevented from becoming considerably stuffy (please see Fig. 3).

JP '406 is silent about a workable number of cells per area. As discussed above, a combination of the setting of the cell density of the foamed slab to about 45-55 per inch and the setting of the air-permeability of the foamed slab to that represented by the formula of $0 < \text{an air-permeation amount} \leq 1 \text{ cc/cm}^2/\text{sec}$ allows the product having such good properties as stated above to be provided. JP '406 does not teach and/or suggest the combination. The combination was finally found by research and

experimental effort by the inventors after many trials. The combination found by such effort of the inventors is highly prized. It would have been difficult or impossible for a person having ordinary skill in the art to find the combination through routine experimentation. Accordingly, it is believed that JP '406 does not render the invention of amended claim 1 obvious.

Rejection under 35 USC 103(a)

The Examiner also rejected Claim 1 under 35 U.S.C. 102(b) as being anticipated by or in the alternative, under 35 U.S.C. 103(a) as obvious over Ogawa et al. [US 5460873]. Ogawa is silent about the range of the air permeability of the foam layer in the cover material. The Examiner indicated that since Ogawa teaches all the structure and composition features of claimed invention, and for the same utility as claimed invention, a workable air permeability is deemed to be either anticipated, or obviously provided by practicing the invention of prior art, dictated by the similar properties required for the same utility.

As discussed above, in the Applicants' product as set forth in amended Claim 1, the foamed slab has the cell structure, the number of whose cells is about 45-55 per inch, and has the air-permeability represented by the formula of $0 < \text{an air-permeation amount} \leq 1 \text{cc/cm}^2/\text{sec}$.

Ogawa does not suggest a linear cell density within the range recited in claim 1. Actually, the only cell population densities mentioned are at the top of column 3: from 20,000 to 70,000 cells per cm^2 . That is well outside the presently claimed range of 45-55 per inch. In addition, Ogawa does not suggest air permeability represented by the formula of $0 < \text{an air-permeation amount} \leq 1 \text{cc/cm}^2/\text{sec}$.

As discussed above, the combination of the cell density of the foamed slab (about 45-55 per inch) and the air-permeability of the foamed slab (air-permeability represented

by the formula of $0 < \text{an air-permeation amount} \leq 1\text{cc/cm}^2/\text{sec}$) was finally found by the research and experiment effort by the inventors many times. As discussed above, the combination found by such effort of the inventors is highly valued. A person having ordinary skill in the art would have been very unlikely to find the claimed combination through routine experimentation. Accordingly, it is believed that Ogawa does not render the invention of amended claim 1 obvious.

Double Patenting

Claim 1 is also rejected on obvious-type double patenting grounds. To obviate this rejection, we enclose a terminal disclaimer with respect to copending application No. 10/596,811.

Conclusion

For the foregoing reasons, it is believed that claim 1, and new claims 2 and 3 (which ultimately depend from claim 1) are patentable over the prior art of record, and that this application is in condition for allowance.

Respectfully submitted,

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April 4, 2008